



UNITED STATES PATENT AND TRADEMARK OFFICE

Sl

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,947	01/13/2004	Norman F. Krasner	000730C1	3281

23696 7590 09/16/2004

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

CUMMING, WILLIAM D

ART UNIT PAPER NUMBER

2683

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/756,947	Applicant(s) NORMAN KRASNER	
	Examiner WILLIAM D CUMMING	Art Unit 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-84 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-84 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. ____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. The disclosure is objected to because of the following informalities:

All copending applications status must be stated.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

6. A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

7. Claims 4 and 19 rejected under 35 U.S.C. 101 because they are same invention as stated in claims 1 and 15 of United States Patent Application 09/074,021.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-3, 5-17, 20-29, 31, 34-39, 43-61, 65-68, 71-75 and 79-84 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Murphy** as stated by paragraph 3 of the Office action dated September 22, 2000 and paragraph 3 of the Office action dated July 8, 2002 and paragraph 2 of the Office action dated December 19, 2002 and Office action dated July 30, 2003, paragraph 2 in 09/074,021.

10. Claims 1-3, 5-17, 20-29, 31, 34-39, 43-61, 65-68, 71-75 and 79-84 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Stansell Jr.** or **Stansell, Jr., et al** as stated by paragraph 4 of the Office action dated July 8, 2002 and paragraph 3 of the Office action dated December 9, 2002 and Office action dated July 30, 2003, paragraph 3 in 09/074,021.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 4, 18, 30, 31, 33, 40, 41, 62, 63, 69, 70, 76, 77, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Murphy, et al** or **Stansell, et al** or **Stansell, Jr., et al** in view of Jones, et al as stated by the Office action dated July 30, 2003, paragraph 6.

Double Patenting

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

15. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

16. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 1-84 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. **09/074,021**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the continuation are broader than the claims in the parent application (*In re Van Ornum and Stanz*, 214 USPQ 761).

18. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

19. Claims 1-84 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 5,812,087 in view of **Murphy** as stated by paragraph 7 of Office actions dated March 21, 2000 and December 9, 2002.

Conclusion

20. All Electronic Copies of Patent Application Records Will Now Be Provided as Certified Copies in Electronic Form

The United States Patent and Trademark Office (USPTO) is changing to an electronic format for the electronic certified copies it supplies of 1) U.S. patent applications as filed, and 2) U.S. patent-related file wrappers and contents. Copies of U.S. patent application documents made from the USPTO's Image File Wrapper (IFW) electronic system will be provided entirely in electronic form and will always be provided as certified copies. In addition, certified copies of patent application documents will no longer be bound, regardless of whether produced from IFW or a paper file.

For the last two years certified copies of large patent application files produced from the USPTO's electronic systems have been provided only on compact disc, with an attached paper certification statement. Currently, certified copies of patent applications as filed of 400 or more pages and all certified File Wrapper copies produced from IFW are provided on compact disc (CD), both with attached paper certification statements. The \$200 fee for a file wrapper and contents was effectively waived and replaced by a \$55 fee when the application contents are provided on CD. See Copies of File Contents Available on Compact Disc Partial Waiver of 37 CFR 1.19(b), 1278 Off. Gaz. Patent Office 261 (Jan. 27, 2004). The fee for an application as filed remains \$20, as set forth in 37 CFR 1.19(b)(1), even when the copy is provided on compact disc.

Effective July 30, 2004, all copies of patent documents purchased under 37 CFR 1.19 and produced from IFW will be provided only as electronic files, with an imaged certification statement included as part of a digitally signed PDF (portable document format) file containing TIFF (tag image file format) images of the document pages. These electronic files may be downloaded from the USPTO website or provided by the USPTO on compact disc. The electronic files are digitally signed by the USPTO for authenticity and integrity, and cannot be undetectably modified. As mentioned above, all copies purchased pursuant to 37 CFR 1.19 and produced from IFW will be produced only as certified copies. Uncertified copies may be downloaded under the USPTO's Public PAIR system.

Before submitting electronic certified copies of the application as filed supplied on CD or in another electronic form to intellectual property

offices under Article 4 of the Paris Convention for the Protection of Industrial Property applicants should inquire whether that office accepts priority documents in electronic form. Although the USPTO provides a certified copy in electronic form, applicants may print the certified copies to paper if required by the intellectual property office to which it is submitted.

The USPTO is actively engaging in discussions with other intellectual property offices for the mutual acceptance of electronic priority documents. Should another intellectual property office not accept a paper or electronic certified copy of a patent application as filed as described in the above paragraph, upon presentation of a notice of non-acceptance by the other office, the USPTO will provide a substitute paper copy with a letter signed by an official of the USPTO addressed to the foreign office indicating that the certified copy of the application as filed is to be accepted under Article 4 of the Paris Convention for the Protection of Industrial Property. Since the USPTO will no longer bind or rivet paper certified copies of patent applications as filed or file wrappers and contents, copies produced by the Office will be identical to copies printed by an applicant from the electronic certified

21. If applicants wish to request for an interview, an "*Applicant Initiated Interview Request*" form (PTOL-413A) should be submitted to the examiner prior to the interview in order to permit the examiner to prepare in advance for the interview and to focus on the issues to be discussed. This form should identify the participants of the interview, the proposed date of the interview, whether the interview will be personal, telephonic, or video conference, and should include a brief description of the issues to be discussed. A copy of the completed "*Applicant Initiated Interview Request*" form should be attached to the Interview Summary form, PTOL-413 at the completion of the interview and a copy should be given to applicant or applicant's representative.

22. USPTO to Provide Electronic Access to Cited U.S. Patent References with Office Actions and Cease Supplying Paper Copies

Summary

In support of its 21st Century Strategic Plan goal of increased patent e-Government, beginning in June 2004, the United States Patent and Trademark Office (Office or USPTO) will begin the phase-in of its E-Patent Reference program and hence will: (1) provide downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions via the E-Patent Reference feature of the Office's Patent Application Information Retrieval (PAIR) system; and (2) cease mailing paper copies of U.S. patents and U.S. patent application publications with office actions except for citations made during the international stage of an international application under the Patent Cooperation Treaty (PCT). In order to use the new E-Patent Reference feature applicants must: (1) obtain a digital certificate and software from the Office; (2) obtain a customer number from the Office; and (3) properly associate patent applications with the customer number. Alternatively, copies of all U.S. patents and U.S. patent application publications can be accessed without a digital certificate from the USPTO web site, from the USPTO Office of Public Records, and from commercial sources. The Office will continue the practice of supplying paper copies of foreign patent documents and non-patent literature with Office actions. Paper copies of cited references will continue to be provided by the USPTO for international applications under the PCT during the international stage.

Deployment of E-Patent Reference System

The USPTO will deploy the full E-Patent Reference program starting in June of 2004. In accordance with the schedule shown below, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions in the indicated Technology Centers (TCs). Paper copies of foreign patents and non-patent literature will continue to be included with office actions.

Schedule

June 2004 TCs 1600, 1700, 2800 and 2900
July 2004 TCs 3600 and 3700
August 2004 TCs 2100 and 2600

Description of E-Patent Reference System

On December 1, 2003, the Office made available a new feature in the Office's Private PAIR system, E-Patent Reference, to allow convenient downloading and printing of cited U.S. patents and U.S. patent application publications. A notice announcing this system was published in the Official Gazette, (see Notice of Office Plan to Cease Supplying Copies of Cited U.S. Patent References With Office Actions, and Pilot to Evaluate The Alternative of Providing Electronic Access to Such U.S. Patent References, 1277 Off. Gaz. Pat. Office 156 (Dec. 23, 2003)). The same notice also announced the Office's future plan to cease supplying copies of cited U.S. patents and patent application publications with Office actions.

The E-Patent Reference system allows an authorized user of Private PAIR to download the U.S. patents and U.S. patent application publications cited on a form PTO-892 in Office actions, as well as U.S. patents and U.S. patent application publications submitted by applicants as part of an information disclosure statement (IDS) on form PTO/SB/08 (1449). The retrieval of some or all of the documents is performed in one downloading step with each of the documents encoded as Adobe Portable Document format (.pdf) files.

The E-Patent Reference system was used by applicants during a pilot program in December 2003 and January 2004. In response to some technical issues discovered by users, changes to make the system more compatible with users' firewalls and office systems were made during the pilot.

Consequently, applicants should expect to start receiving Office actions (in patent applications and during patent reexamination proceedings) without paper copies of cited U.S. patents and U.S. patent application publications in accordance with the schedule above. These documents will be available through the E-Patent Reference system for downloading using Private PAIR. Foreign patents and non-patent literature will continue to be provided to the applicant on paper. Communications from the Office during the international stage of an international application under the PCT will continue to include paper copies of all references, including U.S. patents and U.S. patent application publications.

In summary, all U.S. patents and patent application

publications are available on the USPTO web site, from the Office of Public Records and from commercial sources. Additionally, a simple system for downloading the cited U.S. patents and patent application publications has been established for applicants, called the E-Patent Reference system. As E-Patent Reference and Private PAIR require participating applicants to have a customer number, retrieval software and a digital certificate, all applicants are strongly encouraged to contact the Patent Electronic Business Center to acquire these items. To be ready to use this system by June 1, 2004, contact the Patent EBC as soon as possible.

Steps to Use the E-Patent Reference Feature

Access to Private PAIR is required to utilize E-Patent Reference. If you do not already have access to Private PAIR, the Office urges practitioners and applicants not represented by a practitioner to: (1) obtain a no-cost USPTO Public Key Infrastructure (PKI) digital certificate; (2) obtain a USPTO customer number; (3) associate all of their pending and new application filings with their customer number; (4) install free software (supplied by the Office) required to access Private PAIR and the E-Patent Reference; and (5) make appropriate arrangements for Internet access.

Instructions for performing the 5 steps:

Step 1: Full instructions for obtaining a PKI digital certificate are available at the Office's Electronic Business Center (EBC) web page at: <http://www.uspto.gov/ebc/downloads.html>. Note that a notarized signature will be required to obtain a digital certificate.

Step 2: To get a Customer Number, download and complete the Customer Number Request form, PTO-SB/125, at: <http://www.uspto.gov/web/forms/sb0125.pdf>. The completed form can then be transmitted by facsimile to the Patent Electronic Business Center at (703) 308-2840, or mailed to the address on the form. If you are a registered attorney or agent, then your registration number must be associated with your customer number. This association is accomplished by adding your registration number to the Customer Number Request form.

Step 3: A description of associating a customer number with the correspondence address of an application is described at the EBC Web page at:

http://www.uspto.gov/ebc/registration_pair.html.

Step 4: The software for electronic filing is available for downloading at www.uspto.gov/ebc. Users can also contact the EFS Help Desk at (703) 305-3028 and request a copy of the software on compact disc. Users will also need Adobe Acrobat Reader, which is available through a link from the USPTO web site.

Step 5: Internet access will be required which applicants may obtain through a supplier of their own choice. As images of large documents must be downloaded, high-speed Internet access is recommended.

The E-Patent Reference feature is accessed using a button on the Private PAIR screen. Ordinarily all of the cited U.S. patent and U.S. patent application publication references will be available over the Internet using the Office's new E-Patent Reference feature. The size of the references to be downloaded will be displayed by E-Patent Reference so the download time can be estimated. Applicants and registered practitioners can select to download all of the references or any combination of cited references. Selected references will be downloaded as complete documents in the Portable Document Format (.pdf). The downloaded documents can be viewed and printed using Adobe's Acrobat Reader program and other software.

Other Options

The E-Patent Reference function requires the applicant to use the secure Private PAIR system, which establishes confidential communications with the applicant. Applicants using this facility must receive a digital certificate, as described above. Other options for obtaining patents which do not require the digital certificate include the USPTO's free Patents on the Web program (<http://www.uspto.gov/patft/index.html>). The USPTO's Office of Public Records also supplies copies of patents and patent application publications for a fee (<http://ebiz1.uspto.gov/oems25p/index.html>). Commercial sources also provide patents and patent application publications.

Section 707.05(a) of the Manual of Patent Examining Procedure, which currently provides that copies of cited references are in general automatically furnished without charge to applicant together with the Office action in which they are cited, will be revised in due course for consistency with the practice announced in this notice.

Comments

The Office published a notice announcing its plan to cease supplying copies of cited U.S. patent references with Office actions, (see Notice of Office Plan to Cease Supplying Copies of Cited U.S. Patent References With Office Actions, and Pilot to Evaluate The Alternative of Providing Electronic Access to Such U.S. Patent References, 1277 Off. Gaz. Pat. Office 156 (Dec. 23, 2003)). The Office received numerous comments in response to this notice. A summary of representative comments and the Office's responses to the comment, grouped by topics, follows:

Comment 1: The requirement to use the Office's customer number/digital certificate shifts the responsibility of producing paper copies to the applicant. A number of comments indicated that adopting the proposal would result in an increased responsibility for the applicant, as the applicant or applicant's representative would be required to print the references.

Response: The USPTO is implementing the E-Patent Reference program as part of the Office's e-Government initiative and to align funding priorities to the Patent Initiatives, including the hiring of examiners. Applicants can purchase copies of U.S. patents and patent application publications from a variety of vendors if they choose not to print copies through the E-Patent Reference system.

The USPTO is moving toward electronic filing and processing of both patent applications and trademark applications. The policy announced in this notice is simply a step towards a more fully automated patent examination process. By analogy, briefs and court opinions that include case citations do not include paper copies of the cited cases. Rather, the cited cases are available via books or electronic databases. Similarly, the USPTO will no longer provide paper copies of U.S. patents and patent application publications since they are available electronically free of charge. Finally, this change will avoid duplication and waste since an applicant may not need to print out every page of a cited U.S. patent or patent application publication.

Comment 2: Adopting the proposal would hurt the solo practitioners and pro se applicants the most, which is unfair.

Response: The solo practitioners and pro se

applicants have the same electronic access as the larger firms and corporations, available instantaneously over the Internet. If a solo practitioner or a pro se applicant chooses not to print copies of U.S. patents and patent applications publications through the USPTO Patents on the Web system or through the E-Patent Reference system, commercial sources that provide patents very quickly and inexpensively are available, and copies of U.S. patents and patent application publications are also available at the Patent and Trademark Depository Libraries (PTDLs). Additionally, the cost of patents if ordered from the USPTO Office of Public Records is very reasonable (\$3).

Comment 3: Some applicants indicated that the service is reliable and quick, and consistent with the electronic commerce initiatives in their law firms and businesses.

Response: As pointed out by some respondents, electronic copies of the references are very usable, available without mail delays, and capable of being sent to clients, other attorneys and experts by electronic means.

Comment 4: The statute 35 USC Sec. 132 requires the Office when sending a rejection to state the reasons "together with such information and references as may be useful in judging of the propriety of continuing the prosecution of his application".

Response: The requirement that an Office action contain "such information and references as may be useful in judging of the propriety of continuing the prosecution of his application" was added to the patent laws in the Patent Act of 1870. The circumstances surrounding this provision reveal that it requires that an Office action identify the prior inventions or patents that are relied upon in making a rejection, not that it requires that an Office action be accompanied by copies of the cited references. The USPTO did not even begin providing copies of cited references with Office actions until 1965, when 35 U.S.C. Sec. 41 was amended to authorize (but not require) the USPTO to provide copies of patents cited in Office actions without charge. See 35 U.S.C. Sec. 41(e) ("[t]he Director may provide any applicant issued a notice under [35 U.S.C. Sec. 132] with a copy of the specifications and drawings for all patents referred to in that notice without charge") (emphasis added). Nevertheless, the Office will provide access to U.S. patents and patent application publications, albeit not in paper form.

Comment 5: A number of users suggested that the Office provide paper references at an extra cost.

Response: The Office of Public Records does offer that service, at a reasonable cost, and it is available through a number of delivery channels. See 37 CFR 1.19 (a). Commercial services also provide U.S. reference documents, in person, by mail, and over the Internet.

Comment 6: Some comments indicated that the length of the pilot should have been expanded.

Response: E-Patent Reference system will continue through the end of May to allow applicants to become familiar with E-Patent Reference and to be sure all technical concerns are addressed.

For Further Information Contact

Questions concerning the E-Patent Reference feature and questions concerning the operation of the PAIR system should be directed to the Patent EBC at the USPTO at (866) 217-9197. The EBC may also be contacted by facsimile at (703) 308-2840 or by e-mail at EBC@uspto.gov. Questions about this notice may be directed to Jay Lucas, at Jay.Lucas@uspto.gov and Rob Clarke, at Robert.Clarke@uspto.gov. OG
Notices: 18 May 2004

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM D CUMMING whose telephone number is 703-305-4394. The examiner can normally be reached on Monday-Tuesday 10:30am to 8:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wdc



UNITED STATES
PATENT AND
TRADEMARK OFFICE

William Cumming
Primary Patent Examiner
(703) 305-4394
(703) 746-6075 Fax
william.cumming@uspto.gov

A handwritten signature in cursive script, appearing to read "William Cumming", with a long, sweeping underline that extends to the right.